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|--------------------------|------------------------|------------------------|--|
| Interview Summary | Application No. | Applicant(s) | |
| | 09/303,343 | RAHMAN, MOHAMED ANISUR | |
| | Examiner | Art Unit | |
| | PHUC H TRAN | 2666 | |

All participants (applicant, applicant's representative, PTO personnel):

(1) PHUC H TRAN.

(3) DANG TON.

(2) LATTIG, MATTHEW (45274).

(4) _____.

Date of Interview: 11 February 2004.

Type: a) ☐ Telephonic b) ☐ Video Conference
c) ☒ Personal [copy given to: 1) ☐ applicant 2) ☒ applicant's representative]

Exhibit shown or demonstration conducted: d) ☐ Yes e) ☐ No.
If Yes, brief description: _____.

Claim(s) discussed: 1.

Identification of prior art discussed: _____.

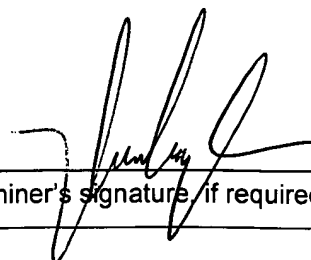
Agreement with respect to the claims f) ☐ was reached. g) ☒ was not reached. h) ☐ N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: Applicant discusses different issue to the claim invention, Applicant intends to amendment the claims to over come the prior art.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN ONE MONTH FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.



Examiner's signature, if required

Interview Discussion Points

Examiner Tran: The purpose of this interview is to reach some agreement to move this case forward, preferably toward allowance, or alternatively toward Appeal. A complete claim set is attached.

Rejections-Nevo

The Examiner alleges that claims 1-7 and 9-14 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Nevo (U.S. Patent No. 6,320,873). This rejection is respectfully traversed.

Applicant respectfully submits that Nevo fails to teach or suggest a method of communicating between a wireless unit and a packet data network comprising, at least sending a setup packet over a circuit switched link between a wireless unit and a base station, sending data packets for a data session over a packet-switched link between the wireless unit and packet data network on a wireless resource that has been temporarily allocated in response to a request for a wireless resource to send data packets for said data session, as recited in claim 1.

The GSM network of Nevo requires a service node to establish a link between a mobile station and a packet data network, and does not describe the actual sending of a setup packet over a circuit switched link between a wireless unit and a base station to establish a data session between a wireless unit and a packet data network over a packet-switched link. In particular, Nevo requires substantial mapping of GPRS frames onto CDMA air interfaces, which is not a focus, nor required, by the present application.

The Examiner relies on Col. 1 lines 54-55, col. 5, lines 50-54, col. 6, lines 40-42, and FIG. 4, for alleging that Nevo teaches sending of a setup packet over

a circuit switched link between a wireless unit and a base station to establish a data session between a wireless unit and a packet data network over a packet-switched link. Each of these passages are provided below

Col. 1 lines 54-55:

Generally speaking, because GSM was developed primarily for circuit-switched transmission, it is not well suited for packet-switched data, as is commonly transmitted over the Internet.

This passage says nothing about sending of a setup packet over a circuit switched link between a wireless unit and a base station to establish a data session between a wireless unit and a packet data network. This passage is directed to the problems in using a circuit-switched link for burst transmission (you wouldn't)

Col. 5, lines 50-54:

Communications between CDMA BSS 32 and MS 40 are based on a CDMA radio "air interface," which is preferably based on the IS95 standard for CDMA communications, and most preferably on the TIA/EIA-95-B version of the standard. BSS 32 is built around a base station controller (BSC) 34, which controls and communicates with a number of base station transceivers (BTS) 36.

This is about the air interface used between BS and MS in a CDMA system. Again, nothing related to "sending of a setup packet over a circuit switched link".

Col. 6, lines 40-42:

MS 40 communicates with CDMA BSS 32 over a CDMA Um interface, based on the CDMA IS-95 air interface, which is modified to support GSM and GPRS signaling standards.

This is a standard protocol (Um) used between MS and BSS. This has nothing to do with sending a setup packet over a circuit switched link.

The setup packet is not a call initiated from the MS to initiate communication. In the present invention, the link is already established. In the present invention, data session setup time is reduced by sending the TCP setup packets as secondary traffic over the already established circuit switched link in the voice circuit frames. As such, delay associated with requesting and being allocated wireless resources to setup a data session is reduced.

This is not foreseen anywhere in Nevo et al., because Nevo is directed to a mobile station that may be configured for conducting general operations with a circuit switched network and general operations with a separate packet data network.

Nevo says nothing about using a circuit switched link to send setup packets to establish a data session between the mobile station and the packet data network. The Examiner is asked to please reconsider his position in light of this distinction.

Rejections-Background of the Art

Applicants will rebut the Examiner's position by pointing out explicitly relied upon sections of the Background.

Page 3, lines 25-29 (Alleged teaching: sending of a setup packet over a circuit switched link between a wireless unit and a base station to establish a data session between a wireless unit and a packet data network over a packet-switched link).

Fig. 1 shows a general block diagram of a wireless communication system 100 with access to a public switched telephone network 102 (PSTN) and a packet data network 104. The wireless system comprises a set of interconnected mobile switching centers (MSCs) 106, each supporting a number of cell sites 108. A wireless unit 110

can establish a voice call using a circuit switched link between the wireless unit and the base station as part of the circuit switched path with another device, such as a wireless unit 110 or a landline terminal in the PSTN 102.

FIG. 1 shows the basic system structure and also explains the basics behind establishing a circuit switched path between a wireless unit and a base station. (a) Where is the established circuit switched link? (b) Where is the sending of the setup packet over the circuit switched link?

Page 4, lines 14-23, page 5 lines 3-4 (Alleged teaching of "sending data packets for said data session over a packet switched link between said wireless unit and said packet data network on a wireless resource that has been temporarily allocated in response to a request for a wireless resource to send data packets for said data session. This feature requires that the data session has had to have been set up already over the circuit switched link

The wireless units 110 communicate with packet data networks 104 by establishing packet switched connections over the wireless network with the PDN 104. Multiple packet switched connections share wireless network resources to establish a packet switched path between the wireless units 110 and the PDN 104. A packet switched link is established between the wireless units 110 and the base station 108 by a burst management system which coordinates the sharing of available wireless resources, such as wireless channels, among multiple packet switched connections. In current cellular CDMA systems, the fundamental channel and/or one or more supplemental channels can be temporarily assigned to packet switched connections to form the packet switched link . . .

The burst management system collates the burst requests and temporarily assigns the available wireless resources to the packet switched connection.

It appears that the Examiner is ignoring explicitly recited features of the claims. This passage shows how to generally set up a packet switched

connection. There is no discussion, whatsoever, about sending data packets from a data session already set up over a circuit-switched link.

Dependent Claim Distinctions

At least some of the dependent claims are not taught by Nevo. Nevo is silent on any teaching of multiplexing a setup packet with a traffic frame, or with a voice frame over a circuit switched link, as recited in claims 4 and 5. Nevo fails to teach or suggest the use of temporary assignments of supplemental channels as the wireless resource for sending data packets for a data session as recited in claim 9. Nevo thus fails to teach each and every element of dependent claims 4, 5 and 9. The Examiner is asked to please reconsider his position in light of these distinctions.

Pending Claims

1. A method of communicating between a wireless unit and a packet data network, comprising the steps of:
 - sending a setup packet over a circuit switched link between said wireless unit and a base station to establish a data session between said wireless unit and said packet data network; and
 - sending data packets for said data session over a packet switched link between said wireless unit and said packet data network on a wireless resource that has been temporarily allocated in response to a request for a wireless resource to send data packets for said data session
2. The method of claim 1, further comprising:
 - establishing said circuit switched link between said wireless unit and said base station.
3. The method of claim 1, wherein said step of sending a setup packet further includes:
 - using an established circuit switched link between said wireless unit and said base station.
4. The method of claim 3, further comprising:
 - multiplexing said setup packet with a traffic frame over said circuit switched link.
5. The method of claim 4, wherein said step of multiplexing further includes:
 - multiplexing said setup packet with a voice frame over said circuit switched link.

6. The method of claim 5, further comprising:
maintaining said circuit switched link for at least the duration of a voice call on said circuit switched link.
7. The method of claim 2, further comprising:
maintaining said circuit switched link for at least the duration of a link layer connection under said data session.
9. The method of claim 1, wherein said step of sending data packets further includes:
using temporary assignments of supplemental channels as said wireless resource for sending said data packets for said data session.
10. The method of claim 1, wherein said step of sending data packets further includes:
sending data packets for said data session on a reverse circuit switched link from said wireless unit to a base station.
11. The method of claim 1, wherein said step of sending data packets further includes:
sending data packets for said data session on a forward circuit switched link from a base station to said wireless unit.
12. The method of claim 1, wherein said step of sending a setup packet further includes:
sending, by said wireless unit, a setup packet over said circuit switched link to establish said data session between said wireless unit and said packet data network.

13. The method of claim 1, wherein said step of sending a setup packet further includes:

sending, by said base station, a setup packet over said circuit switched link to establish said data session between said wireless unit and said packet data network.